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## DETAILED ACTION

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-10, 15-24, 29-34 & 36** are rejected under 35 U.S.C. 102(b) as being anticipated by Bruce (US 6,678,064 hereinafter, Bruce'064).

**Regarding claim 1;** Bruce '064 discloses an image forming device comprising (*"The present invention relates generally to printing methods and systems and, more particularly, to printing services in a communications network."* column 1, lines 7-10): discloses a memory that stores printing data (*"Printing device 130 queues the submitted print requests in memory,*

*processes data associated with the requests, and prints out the data in certain order.*" column 4, lines 34-36); a controller that: (1) enables editing of the printing data previously stored in the memory of the image forming device ("*Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415.*" column 9, lines 25-28); and performs data processing for providing image data from the printing data stored in the memory ("*Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order.*" column 4, lines 34-36); and a printing mechanism that provides printed output of the image data output by the controller ("*For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners*" column 10, lines 4-13).

**Regarding claim 2;** Bruce '064 discloses wherein the controller starts the data processing of the printing data after an editing-allowable state of the printing data has been completed ("*In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the*

*processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33).*

**Regarding claim 3;** Bruce '064 discloses wherein the controller starts processing of subsequent printing data when the printing data next in order is in the editing-allowable state (*“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch*

*screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33).*

**Regarding claim 4;** Bruce '064 discloses wherein the processing of the printing data in the editing-allowable state is started when the editing of the printing data is completed and the processing of the subsequent printing data is completed (*“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.”* column 2, lines 13-22). See also (*“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.”* column 9, lines 25-33).

**Regarding claim 5;** Bruce '064 discloses wherein the printing data is stored in the memory after the printed output is provided (*“However, if server computer 140 is not included in the system to handle the task of processing the submitted print requests, then print requests will*

*be processed by print manager software 131. The processed requests are stored in a memory queue, at step 410, in the order received. The memory queue can be a logical data structure allocated in any type of data storage medium and may be included in printing device 130, server computer 140, or any other device directly or indirectly attached to network 110 or printing device 130.” column 9, lines 15-24).*

**Regarding claim 6;** Bruce '064 discloses wherein the controller also transmits the printing data stored in the memory to the information processor (“*Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.*” column 4, lines 54-65).

**Regarding claim 7;** Bruce '064 discloses wherein the controller starts the data processing after the printing data is entirely received by the image forming device (“*Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a*

*print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 8;** Bruce '064 discloses wherein the controller starts the data processing after the printing data is entirely received by the image forming device (*“Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 9;** Bruce '064 discloses wherein the controller enables editing of the printing data if the printing data satisfies a predetermined condition (*“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330*



*or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.*" column 9, lines 25-33). It is understood that a predetermined condition is more than one print job. Thus, the "printing order" is "manipulated" accordingly.

**Regarding claim 10;** Bruce '064 discloses wherein the controller enables editing of the printing data if the printing data satisfies a predetermined condition ("*Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.*" column 9, lines 25-33). It is understood that a "predetermined condition" is more than one print job. Thus, the "printing order" is "manipulated" accordingly.

**Regarding claim 15;** Bruce '064 discloses an image forming device comprising: a storage means for storing printing data ("*Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order.*" column 4, lines 34-36); editing means for enabling editing of the printing data previously stored in the storage means of the image forming device ("*Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at*

*step 415.*” column 9, lines 25-28); data processing means for performing data processing to provide image data from the printing data stored in the storage means (“*Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order.*” column 4, lines 34-36); and printing means for providing printed output of the image data output by the data processing means (“*For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners*” column 10, lines 4-13).

**Regarding claim 16;** Bruce ‘064 discloses wherein the data processing means starts the data processing of the printing data after an editing-allowable state of the printing data has been completed (“*In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.*” column 2, lines 13-22). See also (“*Referring to FIG. 3, printing device 130 includes a display with a touch*

*screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33).*

**Regarding claim 17;** Bruce '064 discloses wherein the data processing means starts processing of subsequent printing data when the printing data next in order is in the editing-allowable state (*“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22*). See also (*“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33*).

**Regarding claim 18;** Bruce '064 discloses wherein the processing of the printing data in the editing-allowable state is started when the editing of the printing data is completed and the processing of the subsequent printing data is completed (*"In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface."* column 2, lines 13-22). See also (*"Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130."* column 9, lines 25-33).

**Regarding claim 19;** Bruce '064 discloses wherein the printing data is stored in the storage means after the printed output is provided (*"However, if server computer 140 is not included in the system to handle the task of processing the submitted print requests, then print requests will be processed by print manager software 131. The processed requests are stored in a memory queue, at step 410, in the order received. The memory queue can be a logical data structure allocated in any type of data storage medium and may be included in printing device*

*130, server computer 140, or any other device directly or indirectly attached to network 110 or printing device 130.” column 9, lines 15-24).*

**Regarding claim 20;** Bruce '064 discloses an image forming device comprising transmission means for transmitting the printing data stored in the storage means to the information processor (*“Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 21;** Bruce '064 discloses wherein the data processing means starts the data processing after the printing data is entirely received by the image forming device (*“Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial*

*tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 22;** Bruce '064 discloses wherein the data processing means starts the data processing after the printing data is entirely received by the image forming device (*“Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 23;** Bruce '064 discloses wherein the editing means enables editing of the printing data if the printing data satisfies a predetermined condition (*“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory*

*queue of printer 130.*" column 9, lines 25-33). It is understood that a predetermined condition is more than one print job. Thus, the "printing order" is "manipulated" accordingly.

**Regarding claim 24;** Bruce '064 discloses wherein the editing means enables editing of the printing data if the printing data satisfies a predetermined condition ("*Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.*" column 9, lines 25-33). It is understood that a predetermined condition is more than one print job. Thus, the "printing order" is "manipulated" accordingly.

**Regarding claim 29;** Bruce '064 discloses An image forming method comprising the steps of: storing, in an image forming device, printing data transmitted from an information processor ("*Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415.*" column 9, lines 25-28); allowing editing of the printing data previously stored in the image forming device ("*In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue;*

*and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33); and providing printed output of the edited printing data by the image forming device after the editing is completed (“For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners” column 10, lines 4-13).*

**Regarding claim 30;** Bruce '064 discloses wherein subsequent printing data is output as the printed output when the editing of the printing data next in order is not completed (“*In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests*



*in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33).*

**Regarding claim 31;** Bruce '064 discloses wherein the printing data whose editing has been completed is output as the printed output when processing of the subsequent printing data is completed (*“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed*

*on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33).*

**Regarding claim 32;** Bruce '064 discloses wherein the printing data is stored in the image forming device after the printing data is output as the printed output (*“However, if server computer 140 is not included in the system to handle the task of processing the submitted print requests, then print requests will be processed by print manager software 131. The processed requests are stored in a memory queue, at step 410, in the order received. The memory queue can be a logical data structure allocated in any type of data storage medium and may be included in printing device 130, server computer 140, or any other device directly or indirectly attached to network 110 or printing device 130.” column 9, lines 15-24).*

**Regarding claim 33;** Bruce '064 discloses wherein the stored printing data is transmitted to the information processor (*“Printing device 130 can be any kind of printer and may include an adapter card for connecting to a communication network in addition to hardware and software necessary for servicing print requests. Alternatively, printing device 130 may serve as a stand alone printer connected to a print server such as server computer 140. In the former scenario, printing device 130 includes a processor and memory means to directly receive, store, and process print requests as transmitted by client computer 120; while in the latter scenario, server computer 140 performs the initial tasks of receiving, storing, and processing print requests, and then forwards data in printable format to printing device 130 for printing.” column 4, lines 54-65).*

**Regarding claim 34;** Bruce '064 discloses wherein the editing of the printing data is allowed when the printing data satisfies a predetermined condition (*"Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130."* column 9, lines 25-33). It is understood that a predetermined condition is more than one print job. Thus, the *"printing order"* is *"manipulated"* accordingly.

**Regarding claim 36;** Bruce '064 discloses a printing device comprising: a receiving part that receives printing data from a host device (*"However, if server computer 140 is not included in the system to handle the task of processing the submitted print requests, then print requests will be processed by print manager software 131. The processed requests are stored in a memory queue, at step 410, in the order received. The memory queue can be a logical data structure allocated in any type of data storage medium and may be included in printing device 130, server computer 140, or any other device directly or indirectly attached to network 110 or printing device 130."* column 9, lines 15-24); a memory that stores the printing data received by the receiving part (*"However, if server computer 140 is not included in the system to handle the task of processing the submitted print requests, then print requests will be processed by print manager software 131. The processed requests are stored in a memory queue, at step 410, in the*

*order received. The memory queue can be a logical data structure allocated in any type of data storage medium and may be included in printing device 130, server computer 140, or any other device directly or indirectly attached to network 110 or printing device 130.*" column 9, lines 15-24); a printing controller that controls the printing data stored in the memory so as to print the printing data according to a predetermined sequence ("Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130." column 9, lines 25-33); {It is understood that a predetermined condition is more than one print job. Thus, the "printing order" is "manipulated" accordingly}; and an editing part that sets the printing data stored in the memory to an editing-allowable state according to a request from the host device ("In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface." column 2, lines 13-22). See also ("Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with

*printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.*" column 9, lines 25-33); wherein the printing controller temporarily stops processing of the printing data depending on an editing request for the printing data from the host device (*"In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface."* column 2, lines 13-22). See also (*"Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130."* column 9, lines 25-33), {Note: It is well known in the art that if a user manipulates the touch screen of a printing device, it temporarily stops the processing of the printing data}; cancels the temporary stop condition if the editing is completed when a printing order for the printing data arrives so as to perform the printing processing of the printing data after the editing of the printing data (*"In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display*

*screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33); and cancels the temporary stop condition at a predetermined timing after the end of the editing if the editing is not completed when the printing order of the printing data arrives so as to perform the printing processing of the printing data after the editing of the printing data (“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330*

*or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33). Furthermore see (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer 130.” column 9, lines 25-33). It is understood that a predetermined condition is more than one print job. Thus, the “printing order” is “manipulated” accordingly.*

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 11-14, 25-28 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruce '064 in combination with Yellepeddy et al. (US 6,288,790 hereinafter, Yellepeddy '790).

**Regarding claim 11;** Bruce '064 discloses an image forming device comprising (“*The present invention relates generally to printing methods and systems and, more particularly, to printing services in a communications network.*” column 1, lines 7-10): discloses a memory that

stores printing data (*"Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order."* column 4, lines 34-36); a controller that: (1) enables editing of the printing data previously stored in the memory of the image forming device (*"Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415."* column 9, lines 25-28); and performs data processing for providing image data from the printing data stored in the memory (*"Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order."* column 4, lines 34-36); and a printing mechanism that provides printed output of the image data output by the controller (*"For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners"* column 10, lines 4-13).

Bruce '064 does not expressly disclose wherein the controller enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data.

Yellepeddy '790 discloses wherein the controller enables editing of the printing data when an information processor which has transmitted the printing data is identical to an



information processor which requests the editing of the printing data (*"The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics."* column 7, lines 5-13).

Bruce '064 and Yellepeddy '790 are combinable because they are from same field of endeavor of network printer systems (*"The present invention relates in general to print support for data processing systems and in particular to print support for mobile data processing systems or systems otherwise disconnected from a print server. Still more particularly, the present invention relates to a mobile print system employing transient queues to transparently support printing by data processing systems currently disconnected from a selected print server."* Yellepeddy '790 at column 1, lines 5-12).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Bruce '064 by adding wherein the controller enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data as taught by Yellepeddy '790.

The motivation for doing so would have been because it is advantageous to provide an improved method and apparatus for print support for data processing systems (*"It is therefore*

*one object of the present invention to provide an improved method and apparatus for print support for data processing systems.” Yellepeddy ‘790 at column 1, lines 65-67).*

Therefore, it would have been obvious to combine Bruce ‘064 with Yellepeddy ‘790 to obtain the invention as specified in claim 1.

**Regarding claim 12;** Yellepeddy ‘790 discloses wherein the controller enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data (*“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.”* column 7, lines 5-13).

**Regarding claim 13;** Yellepeddy ‘790 discloses wherein the controller enables the editing of the printing data when user information added to the printing data is identical to user information input by a user who requests editing (*“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings*

*notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).*

**Regarding claim 14;** Yellepeddy '790 discloses wherein the controller enables the editing of the printing data when user information added to the printing data is identical to user information input by a user who requests editing (*“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).*

**Regarding claim 25;** Bruce '064 discloses an image forming device comprising: a storage means for storing printing data (*“Printing device 130 queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order.” column 4, lines 34-36*); editing means for enabling editing of the printing data previously stored in the storage means of the image forming device (*“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415.” column 9, lines 25-28*); data processing means for performing data processing to provide image data from the printing data stored in the storage means (*“Printing device 130*

*queues the submitted print requests in memory, processes data associated with the requests, and prints out the data in certain order.*" column 4, lines 34-36); and printing means for providing printed output of the image data output by the data processing means (*"For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners"* column 10, lines 4-13).

Bruce '064 does not expressly disclose wherein the editing means enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data.

Yellepeddy '790 discloses wherein the editing means enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data (*"The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics."* column 7, lines 5-13).

Bruce '064 and Yellepeddy '790 are combinable because they are from same field of endeavor of network printer systems (*"The present invention relates in general to print support for data processing systems and in particular to print support for mobile data processing systems or systems otherwise disconnected from a print server. Still more particularly, the present invention relates to a mobile print system employing transient queues to transparently support printing by data processing systems currently disconnected from a selected print server."* Yellepeddy '790 at column 1, lines 5-12).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Bruce '064 by adding wherein the editing means enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data as taught by Yellepeddy '790.

The motivation for doing so would have been because it is advantageous to provide an improved method and apparatus for print support for data processing systems (*"It is therefore one object of the present invention to provide an improved method and apparatus for print support for data processing systems."* Yellepeddy '790 at column 1, lines 65-67).

Therefore, it would have been obvious to combine Bruce '064 with Yellepeddy '790 to obtain the invention as specified in claim 15.

**Regarding claim 26;** Yellepeddy '790 discloses wherein the editing means enables editing of the printing data when an information processor which has transmitted the printing data is identical to an information processor which requests the editing of the printing data (*"The*

*user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).*

**Regarding claim 27;** Yellepeddy ‘790 discloses wherein the editing means enables the editing of the printing data when user information added to the printing data is identical to user information input by a user who requests editing (*“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).*

**Regarding claim 28;** Yellepeddy ‘790 discloses wherein the editing means enables the editing of the printing data when user information added to the printing data is identical to user information input by a user who requests editing (*“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally*

*edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).*

**Regarding claim 35;** Bruce '064 discloses an image forming method comprising the steps of: storing, in an image forming device, printing data transmitted from an information processor (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415.” column 9, lines 25-28); allowing editing of the printing data previously stored in the image forming device (“In one embodiment, a printing system for processing one or more print requests includes: a print queue for storing data associated with one or more print requests, a display screen for displaying the content of the print queue; control interface for controlling the processing order of print requests in the queue; and executable code stored in a memory, wherein execution of the code by a processor causes the processor to process the print requests stored in the queue in response to user interaction with the control interface.” column 2, lines 13-22). See also (“Referring to FIG. 3, printing device 130 includes a display with a touch screen 320 for providing a user with an interactive menu to view, control, and manipulate print requests stored in the memory queue, at step 415. As shown in FIG. 3, a user may interact with printing device 130's control buttons 330 or menu bar 322 or other interactive features displayed on touch screen 320 to view and control the printing order of the documents associated with the print requests queued in the memory queue of printer

130.” column 9, lines 25-33); and providing printed output of the edited printing data by the image forming device after the editing is completed (“For example, in one embodiment, the scroll bar 328 is provided to allow a user to scroll through one or more sections of the file associated with the print request. At step 470, the user may interact with menu bar 322 or other interactive features displayed on touch screen 320, for example, GUI buttons 340 and 348 to print one or more pages of the selected print request as displayed on display area 324. User interaction with control buttons 330 or GUI buttons provided on touch screen 320 may allow a user to control the operation of printing device 130 in other manners” column 10, lines 4-13).

Bruce ‘064 does not expressly disclose wherein the editing of the printing data is allowed when an information processor which transmitted the printing data is identical to an information processor which requests the editing.

Yellepeddy ‘790 discloses wherein the editing of the printing data is allowed when an information processor which transmitted the printing data is identical to an information processor which requests the editing (“The user may also change the state of a print job within the transient printer queue to the held state to suspend or bypass replay for that print job, or may release a held print job to place it in the waiting state. The user may additionally edit the contents of a print job while it is in the transient printer queue (ASCII files only), copy a print job within the transient printer queue to make a duplicate job, or invoke a settings notebook for a selected print job, allowing the user to modify its characteristics.” column 7, lines 5-13).

Bruce ‘064 and Yellepeddy ‘790 are combinable because they are from same field of endeavor of network printer systems (“The present invention relates in general to print support for data processing systems and in particular to print support for mobile data processing systems



*or systems otherwise disconnected from a print server. Still more particularly, the present invention relates to a mobile print system employing transient queues to transparently support printing by data processing systems currently disconnected from a selected print server.”* Yellepeddy ‘790 at column 1, lines 5-12).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the printer system as taught by Bruce ‘064 by adding wherein the editing of the printing data is allowed when an information processor which transmitted the printing data is identical to an information processor which requests the editing as taught by Yellepeddy ‘790.

The motivation for doing so would have been because it is advantageous to provide an improved method and apparatus for print support for data processing systems (“*It is therefore one object of the present invention to provide an improved method and apparatus for print support for data processing systems.*” Yellepeddy ‘790 at column 1, lines 65-67).

Therefore, it would have been obvious to combine Bruce ‘064 with Yellepeddy ‘790 to obtain the invention as specified in claim 29.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus T. Riley whose telephone number is 571-270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Twyler Lamb can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

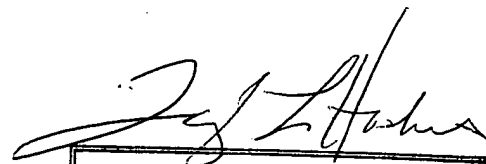
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